THE WOOL PRESS

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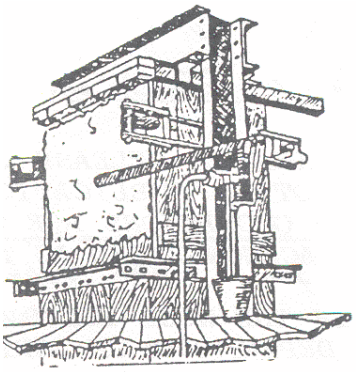
In this issue...

Plus all the usual features and more!



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EDITORIAL

What magnificent early lambing weather we have had in September capped off by a relatively mild winter - lets hope it continues.

Ian Campbell has come up with six excellent reasons why if you don't have a well constructed set of sheep or cattle yards that are easy to hold and work livestock in that you can ask FIDC for a loan to construct yards. They must be part of the development of the farm business and information on these loans is through direct contact with FIDC.

Susan Campbell has written a thought provoking article explaining why it is preferable to spey or castrate working dogs that are not going to be bred from. If they are not neutered both bitches and dogs need to be regularly checked for cancer, chronic pain and other ailments which they are generally more prone to than neutered dogs.

Our travelling correspondent Tony Mills has written a travelogue of his visits to two highly productive performance tested Merino studs with sheep that are producing genetic material suitable for incorporation into the National Stud Flock. He also writes about his training in the use of the ultra sound for assessing carcase characteristics of live cattle and attendance at a major sheep industry seminar that was very relevant to the improved sheep meat and wool productivity issues the DoA staff and farmers are working on here.

Our long awaited 'epistle from the apostle' in the Shaky Isles is in this month's Wool Press. Andy P. has provided an amusing account of his adventures surviving the earthquake, the after-shocks and the dreaded DB lager. Despite all the distractions of the Bledisloe Cup rugby, husband crèches for women who want to shop alone Andy assures us he is working hard at his Lincoln University studies.

Dan Fowler has produced an interesting piece on the Darwin Initiative cooperative project that he is the Falkland's research leader for. The project which is researching ways of reducing the impacts of the invasive brown/sea trout on our native zebra trout hopefully will produce practical ways of protecting and growing the remaining populations of zebra trout.

Tony Mills has in his inimitably quiet, reserved manner asked a few key questions about why improved sheep reproduction rates haven't been achieved across the Islands. Also why are brassica and other crops not being used more extensively on more farms? Tony is genuinely interested in discussing these issues with farmers; on farm; in the DoA office; at smoko; lunch; supper or even sharing a drink to find solutions to help farmers produce more meat, wool and profits.

Zoë Luxton has written the third article in a series on injuries to dogs. This article looks at bone fractures and how initial bandaging of these injuries should be done when dogs are to be transported prior to being treated.

Ian Campbell has prepared an interesting item on what is happening around the world as far as organic wool marketing is concerned. Wool is one of the very few organic agricultural products that haven't boomed but market analysts are still optimistic about its future.

Sam Cockwell has written about progress with his interesting raptor/livestock interaction project and Farrah Peck has introduced herself as the new office administrator and 'Jill of all trades' at Falklands Conservation.

There are a couple of contributions on care of calving cows and conservation to complete this information packed edition. Ring Katrina on 27355 to make contact with DoA staff if you need more information or want to discuss any issues raised.

Enjoy your read.

Best regards,

Mac McArthur
Senior Agricultural Advisor

CARE FOR CALVING COWS

By Mac McArthur

With spring now pretty well sprung, attention to cows that are due to calve in October and November is paramount if you are going to have them milk well and then get them back in calf. In fact ensuring that your pregnant cows are in fat score 3 (7-12 mm P8 site, 4-7 mm 12th rib) prior to the last 3 months of pregnancy and being fed well enough to ensure they are maintaining this body score is the key to getting cows to calve every year.

Annual Calving

Having cows calving annually around the same time each year requires excellent nutritional management. Achieving this requires forward planning to ensure that quality feed is available at the time the cows require it.

Having a calf and milking well enough to raise a decent calf that is 200 to 220 kg at weaning (6 months old) effectively doubles the energy requirement of the cow. Under extensive grazing on whitegrass camps this is a big ask. As a consequence cows need to metabolize body fat reserves to provide this energy.

Time to Return to Oestrus

Cows that don't go into the winter carrying at least 4-7 mm (12th rib) of fat cover or are unable to gain it prior to calving are going to struggle to calve easily and meet the milk production demands of their calf. After calving, cows require time and food energy for their bodies to recover from delivering a calf and return to oestrus. This time to return to oestrus is directly related to the cow's condition score at calving. Cows that are in ideal condition normally start cycling again within 55 days after calving and cows that are carrying less than this amount of fat may take up to 85 days or more.

The average beef cow is pregnant for 283 days if she is in good breeding condition and returns to oestrus in 55 days so has only 27 days to get in calf if she is going to calve at the same time each year. If joining is only for 6 weeks as it should be, the early calvers have 82 days to get in calf from calving but many of the later calving cows will only have from 42 to 56 days (6-8 weeks) which means even those in ideal condition score for breeding will be pushed to get in calf in time.

Joining Maidens

Maiden heifers that are above 330kg and are carrying 4-7 mm of fat should be cycling well and can be joined as rising 3 year olds. It is important to join them for the first time to known (recorded) low birth weight bulls, preferably 4-6 weeks prior to the older cows. Maiden heifers at calving need more food energy than mature cows as they are still putting food energy into their own growth as well as milk production and returning to oestrus, so will take longer than the 55 days on average that older cows do.

To ensure that you are introducing highly fertile heifers into your herd it is important to join them earlier than your main herd for 6 weeks, pregnancy test them 10 weeks after the bulls have been removed and cull any that are not pregnant. Research shows that heifers that are up to joining weights and in good condition that don't get in calf to fertility tested bulls over a 6 week joining will be infertile or lowly fertile throughout their lifetimes.

Nutritional Anoestrus

Nutritional anoestrus is a major problem on many farms across the Falklands and it is not uncommon for a farm to run twice the number of cows required to produce the numbers of calves wanted. If you think about the basic

National Beef Herd cattle at Bold Cove

economics of this practice they don't stack up very well. If you require 45 calves annually to provide heifer replacements, sell weaners and or finish 2 year old beef, you should be able to achieve this with a herd of around 50 cows. If instead you run 100 cows and only join half of them every second year you are running half the cows for no return. They are eating the feed of 500 dry sheep equivalents (50x10 DSEs) from which you could have produced lambs and wool.

Ensuring that cows have adequate nutrition to be in ideal condition as well as weaning calves when they are 6 months old (ideally weighing 200 to 220 kg), are both critical to annual calving and a profitable beef enterprise. If your cows have the genetic potential and the feed to milk optimally you may be able to get a proportion of your weaners that have fat cover of 5mm or above sold to FIMCo for good prices and lighten off your stocking pressure as well as providing a cash flow.

If you wean your calves at 6 months, the cows are effectively dry for 3 months before they calve again. This gives them the opportunity to maintain or improve their condition over winter and consequently start cycling relatively quickly after calving.

Supplementary Feeding

To meet the nutritional requirements of cows to ensure they calve annually may require supplementary feeding of cattle nuts, silage, carefully managed tussac or sowing of oats and brassicas. Clearly, added costs are involved, but if you do your sums at the present FIMCo schedule prices there is good money to be made. A rough guide is that with supplementary feeding on brassicas and high quality reseed pasture it costs (variable cost) around £150.00 to get a 2yo beast up to the FIMCo spec of 5+mm and depending on carcase weight the profit can be between £100-£250 per head depending on the transport distance to FIMCo.

Better than being all shook up in the 7.1 earthquake and the 600+ after shocks that Andy P. has experienced recently in Christchurch in the Shaky Isles!

SIX REASONS TO BUILD A NEW SET OF YARDS

By Ian Campbell

Recently there have been many articles in the Wool Press and discussions at Farmers' Week about increasing the level of livestock production in the Falklands and in particular those sheep and beef cattle destined for FIMCo. Much of this discussion has centred around nutrition and management factors but another big aspect of management is having and using effective handling facilities.

A well constructed set of sheep or cattle yards, designed to handle your typical flock or herd size, has a lot going for it. As an example I am sure the reluctance shown by some towards the cattle identification scheme is a symptom of inadequate handling facilities making it difficult, strenuous and dangerous rather than being a true reflection of people's right not to tag cattle. Straight away there are three very good reasons to construct a good set of yards, I thought I could see how many I could find.

1. **Safety.** Particularly with cattle; a well constructed handling facility enables many jobs to be done safely and efficiently, while greatly reducing the danger of injury to the operators. It is also less likely to injure animals (aka bruise the meat) so there is a meat quality aspect to this as well. Escape routes, gates that work well, gate catches that hold and the type of ground underfoot (no rocks to trip over) are all important safety

aspects.

2. **Saves work.** Well designed and constructed yards mean people spend less effort moving stock around the yards, getting the job done quicker and more efficiently, perhaps with less people required, which is better for all concerned. This has many other benefits as well.

3. **Less stress.** Stressed animals become dangerous animals. If you stress them once it is harder to get them back next time. Stressed animals also become tough meat- another quality issue. Stressed farmers are more likely to make mistakes. Interestingly, strong cattle crushes with little slop and noise are far less stressful than rattley crushes with a bit of give in them for the animals to work on. Stressed animals loose weight and fatness which costs you. They also mean less stress for the veterinarian who happens to have his/her arm in up to the shoulder.

4. **The job will get done**. We often suggest weighing and condition scoring, drenching, pregnancy diagnosis, yard weaning etc- all jobs that need a good set of facilities or they just do not ever get done. A number of things are placed in the "too hard" basket that should just be simple routine. I am sure that many productive farm practices including DoA recommendations are often not followed for these reasons.

5. **Quality**. Already mentioned with bruising and stress but deserving of some more discussion. Jobs also get done properly ("Have I drenched that one? We'll give it another to be sure.") and that is an important aspect to quality. Animals spending less time in the yards will have more time back on feed and so on.

6. **Investment**. A good set of yards should make your livestock business more profitable in the short term and is also a good capital investment which should improve the value of the farm.

So that is 6 good reasons. Obviously though they are expensive. Steel, heavy timber, concrete - all words that get the cash register ringing in earnest.

I am sure that the innovation Falkland Islanders are renowned for will allow for some imaginative solutions – particularly in the holding rather than working sections, yet quality facilities will always cost money.

FIDC can lend money for the purchase or construction of yards, as long as they are part of the development of the farm business and you have all the plans etc. to demonstrate this. If you want information on these loans please contact FIDC direct. It is also an allowable use of labour scheme funds to work on cattle and sheep handling facilities. DoA manages the labour scheme. With access to both these schemes the construction of new yards should be a little less onerous than it otherwise might be.

For cattle yards start small with a crush, bailhead, circular race and forcing pen and one holding yard for the number of cattle you are normally handling. Then build on pens as you need or can afford them.

Mac tells me that he visited a farm recently that had built two lamb marking and mothering up pens with used corrugated iron sheets capped for safety, a few posts and some sheep netting and recycled fishing net for a very minimal cost. The outcome will be considerably reduced droving of stock and considerably reduced mismothering losses - it will probably pay for itself in the first few hours of lamb marking...

Finally, if you need help on site location or design and layout, we are more than happy to help there. If you are going to invest money and time into a new set of yards then it is important to plan them out well and to look at many of the lessons people have learned about efficient and effective livestock handling facilities.

WHAT TO LOOK OUT FOR IN UNSPEYED BITCHES AND UNCASTRATED DOGS

By Susan Campbell

It is common in camp for dogs and bitches to remain unneutered. Although I have previously discussed the virtues of neutering dogs of both sexes I do understand that a source of puppies has to come from somewhere so there is good justification for leaving excellent working dogs which are free of genetic faults unneutered if you want to breed from them.

However this does come with its draw backs. As well as the obvious one that you have to keep the bitches well away from the dogs when they are on heat unless you are intending to have puppies, both bitches and dogs are more prone to health issues if they are left unneutered and their life spans are normally expected to be reduced.

In many countries where annual vaccinations are routine the vet will do a complete examination of the animal and this is an opportunity to pick up on many things at an early stage. In the absence of this may I recommend that it is really a good idea to do your best to give your own dogs the once over a couple of times a year if not more often. Have a good look at every aspect of the dog and run your hands over its body checking for lumps and swellings or any signs of pain. Systematically flex and extend all joints and see if there are signs of pain in any of these too. Unfortunately our animals are not good at letting us know when they are in chronic pain and we really need to go and look for it.

Unneutered dogs are far more prone to prostate cancer and of course can potentially get testicular cancer. Both of these are most common in older dogs and are something you can easily look out for. With a dog with prostate problems the first sign is often straining when defecating and possibly constipation. This will usually be backed up by an examination by a vet which will show an enlarged prostate. Quite often if the enlargement is non malignant it can be resolved by castration of the dog at this stage. However if it is malignant then it usually will be fatal at some stage.

Unspeyed bitches are more prone to mammary gland tumours. These will occur more often in bitches that are speyed after they have had a heat than if speyed before they have a heat and then more often in bitches that have puppies than those that don't. To keep an eye out for these tumours you need to feel the tissue along the belly and around the teats for any lumps. Often they start out as just a pea-like lump but will grow considerably, eventually there may be multiple lumps and these can soon ulcerate at which point little can be done. So the lesson here is the sooner they are removed the better the chances for the bitch as these tumours can also develop secondaries in the lungs in particular.

In addition to mammary gland tumours bitches need to also be watched for infections of the uterus. This potentially lethal condition may present as prolonged heats, bloody, purulent or cloudy mucoid discharge from the vulva, or in the case of when the cervix is closed the pyometra will have no discharge and they may present as no more than the dog going off colour or often they may be drinking and urinating more, possibly vomiting and have a distended abdomen. Suspected pyometras are an emergency and the dog should be seen as quickly as possible.

If you notice anything unusual on your dog or in the apparent health of your dog we are just at the end of the telephone and it never hurts to ask us what we think. Please don't leave it thinking it will get better; we much prefer to see the animal at the outset of the illness rather than when it is well established.

AUSTRALIA VISIT JUNE/JULY 2010

By Tony Mills

While I was in Australia the opportunity was taken to carry out some work on behalf of the Falkland Island Government. This included visits too two of Australia's leading Merino sheep studs, training in the use of ultrasound for live beef carcase assessment, developing future linkages with key research and extension organisations and attendance at a one day seminar relating to sheep production.

Sheep stud visits

The first sheep stud visited was Leahcim Poll Merino & White Suffolk Stud, Snowtown South Australia. The sheep business is run over two properties where the average rainfall ranges between 220 (pastoral country) to 470 mm (improved pasture) per year. Leahcim Poll Merino stud has a balanced approach to selection using both visual and objective selection tools. This has lead to Leahcim being a registered SRS® stud as well as using the services of Sheep Genetics Australia (SGA) and their analysis used to generate Australian Sheep Breeding Values (ASBV's). This stud has also been exporting genetics to Jose (Pepe) Marin located outside of Punta Arenas for the past 12 years. They have been heavily involved in developing sires with low breach wrinkle scores that has lead to them not mulesing for the past 6 years. Their health focus also extends to internal parasites. Leahcim would be considered a fine to medium wool producer.

The second stud visited was Centre Plus Nucleus Stud located at Tullamore, New South Wales (NSW). This district is commonly referred to as a mixed farming area producing grain crops, cattle and sheep with the ability to breed as well as fatten. Centre Plus is well known for using the latest scientific techniques along with good management focussed on selecting an all purpose Merino. Centre Plus has for many years used a group breeding structure which has a current membership of 18; utilising approximately 20,000 breeding ewes. The aim of this structure is to exploit a diverse genetic pool from diverse environmental backgrounds in order to improve economic and commercially relevant traits.

It could be said that the objective approach is their starting point; however they have also been keen to use visual appraisal methods (including scoring skin traits used in the SRS method of classing) and have actually been instrumental in developing some key industry tools (e.g. Visual Sheep Scores booklet) that are now being utilised to develop new ASBV's (breech wrinkle score). Like Leahcim there is a focus on animal health especially selecting for internal parasite resistance.

Ultrasound training

The DoA has an ultrasound which can be used to assess the eye muscle area, subcutaneous fat tissue (12th rib and P8 site) and intramuscular fat tissue of live cattle. To get the best use out of this machine two days of scanning training was organised with Matt Wolcott, Animal Genetics Breeding Unit (AGBU), University of New England, Armidale NSW. Matt is the person who trains and accredits all scanners in Australia. Because of this training the DoA is now in a better position to assist the beef industry through improved live assessment technology which can enhance the current skills of producers.

Meetings with key industry service personal

I had the opportunity to meet with staff within some of the key organisations supporting the sheep industry in Australia. The first of these were staff from Industry and Investment NSW (formerly the Dep't of Agriculture). We now have an updated version of the Rampower Indexing tool which is used as part of the selection process for the NSF and JV flocks.

I also took the opportunity to meet with Associate Professor Geoff Hinch based at the University of New England (UNE), Armidale. Professor Hinch oversees the reproductive efficiency project within the Sheep Cooperative Research Centre (CRC). The

core charter of this project is to provide practical tools for producers to improve the reproductive efficiency of their sheep. This project has already developed the following workshops which are being taken up by the industry:

- Scanned ewe management
- Lifetime ewe management
- High performance weaners

Sheep Genetics Australia (SGA) also has an office on site at UNE. As one of my old college classmates works for SGA I took the opportunity to visit him while on site. This proved beneficial as he was able to provide the DoA with two web based tools that can help assist with the data management of the National Stud Flock including determining the level of inbreeding and mate selection should we want to move away from the current 'Family' mating structure.

'It's ewe time' seminar

I was able to attend a major sheep industry seminar held in Dubbo, NSW relating to sheep production. The day was attended by approximately 250 sheep producers. There were eight sessions covering the following topics:

1. Ewe selection and the use of the key EBV's available in LAMBPLAN and MERINO SELECT;
2. Weaning more lambs;
3. Sheep health with a focus on internal parasites;
4. Business management focusing on labour saving investments and calculating costs of production;
5. Turning pasture into product and pasture budgeting;
6. Profitable finishing systems;
7. Meat quality and the genetic and on-farm management links
8. Summary of the sheep industry and the opportunities that exist.

It was very apparent from discussions during the breaks that highly profitable producers and those working on their enterprise to become more profitable had or were adopting the following practices:

- Grazing management – rotational and/ or rotational and set stocked (shorter periods not annual)
- Improved ewe nutrition – especially pre-lambing
- Live animal assessment – for marketing and management
- Internal parasite control
- Use of ASBV's balanced with visual selection
- Analysing the business (especially developing cost of production) and
- Labour efficiency (more often related to capital investment)

CONSERVATION AT SALADERO

By Mac McArthur

Saladero, the DoA's research, development (R&D) and demonstration farm, has recently attracted a pair of black necked swans which have taken up residence on one of the ponds. The pair appear to be well settled and hopefully they will nest and produce some cygnets this spring.

Conservation and farming go hand in hand throughout the Falklands and farmers, as custodians of the land, are conservationists of plant, bird and animal species and ensure that their farming enterprises are in harmony with penguin rookeries, other bird and mammalian breeding colonies.

I find it interesting that last summer at Saladero in an area that had been grazed quite heavily by sheep and been mown a significant number of times, the native yellow pale maiden flowers was observed by a vigilant DoA staff member. In an area that they had previously been observed but which has subsequently been fenced off from stock they were nowhere to be seen. So judicious grazing with domestic livestock can enhance the long term thriving and sustainability of native plant species.

The R&D work that Drs. Sergio Radic, Sergio Opazo from the University of Magallanes and Jim McAdam from Queens University, Belfast are involved with using state of the art satellite technology to identify native and other plant species on camps have great potential to develop long term sustainable stocking rates for the Falklands. Also Dr Rebecca Upson's research work looking at grazing management effects on native species will provide some valuable data for improving the sustainability of rare native plants in harmony with productive agriculture. Improved sustainable grazing management methods, stocking rates and timings of grazing will ensure better long term sustainability of both our native species and of agriculture in the Falklands.

Hopefully spring at Saladero will bring loads of lambs, cartloads of calves plus some cygnets to 'swan around'.

Black necked swans on Bleaker Island

NEW ZEALAND – A NATION PROUD OF ITS FARMING, RUGBY, BEER SWILLING

By Andy Pollard

Walking back from the city centre along Oxford Terrace, daffodils are flowering, trees are budding and the scent of blossom is strong. Before the Knight boys think I have been smoking the indigenous plants, the point I am making is that spring is kicking in and it is welcomed!

I am currently in New Zealand doing postgraduate studies in agronomy at Lincoln University. The University is a rural campus and stretches back over 125 years (so Mac and Blako were not original students!). You may ask why Lincoln? Firstly, the University is world renowned for its teaching and research in agricultural sciences. There are also many similarities between South Island NZ and the FI. The soils were originally acidic (many hill farms still are) and are deficient in nutrients such as phosphorus and sulphur. Whilst the growing season is slightly longer, they suffer from moisture in summer and cool winter temperatures just like the Falkland Islands.

Since the 1950's, New Zealand has been famous for its perennial ryegrass and white clover pastures. These species are great in areas were moisture is not limited (shallow root systems). The white clover is a good companion supplying nitrogen through fixation to the grass. In drier areas in summer, several other legumes and cocksfoot in particular are valued as more suitable plants for climates like here in Canterbury.

The postgraduate courses here attract students from all over the globe. There is a large contingent here from the US, Norway and Indonesia. My fieldwork group consists of a guy from the Philippines, an Indian, a Sri-Lankan and a Paddy. I am hopeful that we have kept experimental error to a minimum despite the lack of cohesion from supporting different football and cricket teams (actually the paddy is a Man U fan too!).

It would be impossible writing an article without mentioning the biggest sporting achievements in this neck of the woods. The All Whites stole the headlines by being the only unbeaten team in the World Cup. Ladies, please see the picture below, this is great advice if you want your shopping to be relaxing and Mr Alazia I am sure you would have appreciated this approach in the UK! I left the FI before the real disappointment of the English performance kicked in. However, upon arriving in New Zealand tired after the long flight and petrified of customs as my VISA was still in progress the ice was broken when a huge Maori customs officer looked at my easily identifiable British passport and burst out laughing. At this point in time I knew England were out and probably by more than one goal. It's a funny game football, when you can go from booing the Germans one week to hugging them a week later because they just beat Argentina!

Of course the All Blacks are in full flow too, running over the Springboks and Wannabies twice. I managed to watch the Bledisloe here in Christchurch (not wearing my England shirt and nor did I sing sweet chariot); whilst the haka was inspiring so was the passionate singing of the national anthem by the Kiwis. The hype is building for the world cup and if anybody is lucky enough to get over here for it I am very envious, it will be a cracker!

I was lucky to meet up with Jack Wilson's brother and his family here in Christchurch (seems to have some stories about Hew). Welcoming, like all kiwis, they took me out to Little River to watch a local game at grass roots level. Apart from stepping over the touchline in eagerness to play I was dragged into the bar to sample the local DB afterwards. The beers were like in the movies (longnecks) and after a gut full of these it was back to their house to watch the International

AND A FALKLAND ISLANDER WILLING TO LEARN MORE ABOUT NZ CULTURE!

game. Anyway I would like to think I represented the FI well on this occasion until the following morning. Up early and dry as a bone, I helped myself to the kettle, whacking it on the gas. The realities of the DB hit home when I realised the kettle on the gas hob was actually electric and the fumes of melting plastic soon filled up the room.

I actually wrote this article to go in last month, but due to the number of contributions I was left out till October. In hindsight I guess Siân forecast what was going to happen next; a devastating earthquake that hit Canterbury. Luckily there was no fatalities, perceived here as a modern day miracle. It was so lucky that the earthquake occurred at 4.30am on a Saturday morning as opposed to during the day in a bustling city. I might add that the earthquake occurring was not a result of me taking any Kiwi girls home on the Friday night!

I was awoken by a terrifying rumble (like having a train running through your house) and of course the violent shaking (I honestly felt sea sick after), what was really bad luck though was a glass of water falling on me from my bedside table. I now know that in the event of an earthquake to get under the table and hold onto its legs (I have a small coffee table which would have made an amusing video for YouTube, watching me try to get under it for the subsequent tremors), this is useful advice as my reaction after feeling stupid squatting under my doorframe was to run into the street solely in my boxers. The earthquake may have been 7.1 on the Richter scale, but the subsequent shock was probably more for the neighbours University was cancelled for a week and even now we still cannot fully access the literature in the library.

I utilised this time to help the student workforce, 3000 strong, formed on Facebook, to clear the silt from badly affected suburbs (the silt was a particular concern for flooding as Canterbury has also had its annual rainfall in less than 3 months since I have been here). An elderly lady showed me around her house, which had moved a whole foot, an entire street in the eastern suburbs we were on will have to be demolished. Kiwis to their credit don't sit back and admit defeat; the attitude instead is for a community to rally together and help those that need it. This may be by comforting, by finance or put simply "a bit of muscle". Thankfully nearly 3 weeks on we are only receiving sporadic aftershocks, two today so far (11am). I now know why Mac refers to them as the Shaky Isles!

Whilst enjoying my time in New Zealand (yes, even after the quake), the main reason why I am here is to study. Bringing back to the FI the principles and latest research and techniques in agronomy. The contacts being made here are vital to that success when I return to the Islands. Whist I am going to miss out on spring in the FI (I return mid-November) please feel free to email me with any questions, I am accessing DoA mail. Alternatively please contact the team who I am sure will gladly assist you with your enquiries.

AN UPDATE ON THE DARWIN PROJECT

By Dan Fowler

Scientific interest in zebra trout first began in the 1830s when Charles Darwin collected an unnamed fish during his trip to the Falklands. Some time later in Britain, a man named Leonard Jenyns studied Darwin's specimen, christening the fish the zebra trout (scientific name *Aplochiton zebra)*. We know now that it is not a proper trout, (a member of the salmonid family) but is in fact a galaxiid, making it a member of the same family as the Falklands minnow (*Galaxias maculatus*).

It took over 160 years before anyone showed any further scientific interest, when Dr Robert (Bob) McDowall visited the Islands in 1999 with his co-workers to survey the zebra trout in the Falklands and investigate their abundance (incidentally, I'm pleased to say Bob still has an interest in the Falklands and has agreed to be an advisor to the new project). His brief survey suggested that an introduced salmonid (the brown/sea trout) was taking over what was previously zebra trout territoty. Later work by FIDC's Aquaculture Project and Dr Katherine (Frin) Ross confirmed that this is the case; brown trout are spreading and zebra trout are declining. Sadly, no-one ever found the money to do more than conduct brief surveys highlighting the decline of zebra trout. Until now…..

As of last month, a new project was born. FIG teamed up with Swansea University, Universidad de Los Lagos (Chile) and Oregon State University to put together a successful bid for a two-year project entitled, 'Reducing the impacts of invasive salmonids on native galaxiids'. Fittingly, the funding has come from the Darwin Initiative, a scheme which assists countries rich in biodiversity but lacking in sufficient financial resources. Chile was awarded an equivalent sum of money and is running a similar project on galaxiids there (zebra trout and minnows are found in Patagonia too). By working together we're hoping to learn from each other and maximise the conservational benefits.

Juvenile zebra trout

Frin Ross electrofishing on the West in 2008

I've been appointed as the project's Falklands researcher and it is my goal to fully understand the current plight of galaxiids and to find practical ways to protect the remaining healthy populations of zebra trout. We're looking at captive breeding of zebra trout for release, keeping brown trout out of certain areas, and creating refugia - areas where zebra trout can live free from the threat of brown trout.

To understand what the zebra trout are up against, we'll need to understand the brown trout population and the interactions between the two species. Aside from protecting the zebra trout, as an occasional fisherman I'm hoping the work we do on brown trout can improve the fishing. Sea trout fishing in the Islands is good, but I'm reminded of a farmer who approached me wanting guidance on river management, as he felt his fishing river was not achieving its full potential. At the time, I didn't know too much about river management, and truth be told I still don't, but as the project moves along this will change, and I'm keen to pass this knowledge on to anyone that is interested. Whilst protecting galaxiids is my first priority, for better or worse sea trout will forever be a part of the Falklands environment, so we should maximise the economic and recreational benefits it can bring to the Islands where responsible to do so.

All the previous work has given me a rough idea of where zebra trout and minnows can and can't be found, but there are still a lot of knowledge gaps. Over the next six months I'll be out and about in the Falklands, wading through streams, speaking to farmers, exploring, and probably getting lost and bogged, all in an attempt to bring everybody's knowledge together to build the complete picture. I can't wait.

WHAT CAN BE DONE ABOUT REPRODUCTION RATES

By Tony Mills

I would think that this topic is one of the most discussed within the farming community of the Falkland Islands. The ability to reproduce enough replacements has long been a problem and it, along with death rates, is the key driving force behind the sustainability of the industry.

After attending the sheep seminar and driving approximately 8,000 kms when in Australia I found myself pondering why significant advances in the reproduction rate have not been made Island-wide.

Below are some of my ponderings. As always I do this to promote further discussion and am more than happy to do this on-farm. As someone politely put it 'the weather is warming up so no doubt like the blue buzzers the DoA will be out and about'!

Breed – Is this really the issue or is something else at play? I have done a preliminary analysis of past lambmarking data and found that even when you go back to say the 60's and 70's some of the properties that ran strong wool breeds that were considered to be more suited to the Falkland Islands still had lambmarking percentages in the 60's. Munro (1924) states quite strongly the suitability of the Romney to the environmental conditions experienced here. However he also mentions that these animals were still not performing to their productive potential.

Do finer wool sheep require better or more feed? I haven't really found a good explanation of this theory and would like to discuss it further. My training tells me that nutrient requirements depend on climatic conditions, rate of growth, liveweight, or stage of pregnancy and lactation not how fine an animal's fibre is.

Selection – Has there been too much emphasis on fibre diameter? For quite a long time now profitability of a wool sheep business has been linked to fibre diameter and it is a long held trend that finer wool has a higher value. I would suggest that this has been the major focus of change by the majority of sheep breeders and even those of us that have held Ag advisory posts. I also think that maybe with the latter a key message that might get lost is the need to consider all traits that are important to maintain profitability i.e. fibre diameter, fleece weight, body weight and fertility. I note that in Davies et al (1971) the comment was made that of 18 farms surveyed only one mentioned wool weight as a prime trait to select for but wool quality was the major selection characteristic. Only 3 farms looked at aspects relating to fertility and that was in the rams.

How do producers select for fertility? At Saladero we have been using the scanning and lambing data to identify those ewes that are dry or not rearing a lamb. I have a strong bias towards using the technique known as wet and drying. I am not sure it is widely used here and wonder, why not? Is there something that is more useful being used?

Nutrition – Why is there not more crops being used? This is one I can't get my head around. It is quite well recognised here that nutrition is key. But why is there a lack of adoption of improving country to utilise crops that are proven to grow here? I have had it mentioned to me on numerous occasions that when some cropping was carried out there was an immediate and positive response in lambmarking percentage and death rates. I would have thought that this would have been enough incentive to keep going. What am I missing? Could this be an opportunity lost given the numerous comments about the condition of the native pastures and the long occurring encroachment of low value species such as diddle dee and small fern. I believe that producing brassica crops for ewes to feed on in the last trimester of pregnancy will improve lambing percentages. Can someone advise me why it is not being used on a larger scale?

I would genuinely like to discuss the items mentioned above with as many producers as possible. I would also hope that from these discussions tangible gains can be made.

FRACTURES

By Zoë Luxton

In previous articles we have discussed joint disease, hip problems and ruptured cruciate ligaments as causes of lameness in dogs. The final topic that we will mention today are fractures. It is very difficult to write a general article about fractures as the type, location and clinical signs will be different for every single case.

Hairline fractures or fractures of smaller bones will cause lameness but often the dog will still be using the limb to some extent. At the other end of the scale are displaced, comminuted (several fragments) fractures of the long bones which render the dog unable to bear any weight at all due to pain and mechanical reasons.

Diagnosing severe fractures is usually fairly straightforward, the animal will be showing signs of pain, the area will be very bruised and swollen and the limb will be unable to bear any weight. The fracture may be a compound fracture ie one of the fractured ends of the bone may have penetrated through the skin and be visible, or at least easily palpated under the skin having penetrated though the soft tissue below.

Less obvious fractures will still be extremely painful and careful, gentle palpation of the limb will often reveal a particularly painful spot. As you move all bones and joints gently under your hands you may feel 'crepitus' which is the creaking or grinding of bone moving against bone or you may just feel a click or a snap in an area where you normally would not.

Regardless of the type or extent of the fracture, an x-ray is still the most useful diagnostic tool as it will confirm or rule out fractures that are not so obvious and will show us the extent of the severity of a larger bone injury. It's the same old message, if in doubt, keep the dog quiet and give us a ring.

First aid wise; pain relief and immobilisation of the fractured area are the most important things. If you have animals and do not have easy access to veterinary supplies it is quite useful to keep a vet box with a small amount of Metacam or similar painkiller suitable for dogs and cats. Remember that neurofen based drugs are highly toxic to dogs and paracetamol and aspirin must be given with careful regard to the animals weight and general health. Paracetamol is toxic to cats.

A support bandage for a fractured limb can be fashioned out of pretty much anything but we can supply you with one or two rolls of bandage and some dressings for a vet box also.

If you are bandaging up a limb to give it support prior to the dog coming to the vets there are one or two important things to remember:

- Cover any open wounds with a proper dressing – a band aid is fine, just make sure there is a soft, absorbent, non-sticky area to cover the whole of the wound. Then bandage over the dressing.

- Do not bandage too tightly – although we want to provide support to the limb if it is swollen and bruised having it squeezed under a tight bandage will cause more pain and cause further tissue damage. If a joint is fractured or dislocated the displaced bones may be pressing on important nerves or blood vessels so squeezing the area tighter under a bandage is likely to cause more damage – so bandage with care.

- If the injury seems to be mid-limb, bandage the whole limb – especially down over the dogs toes. This will prevent the foot swelling below the bandage which again is uncomfortable and causes circulation problems.

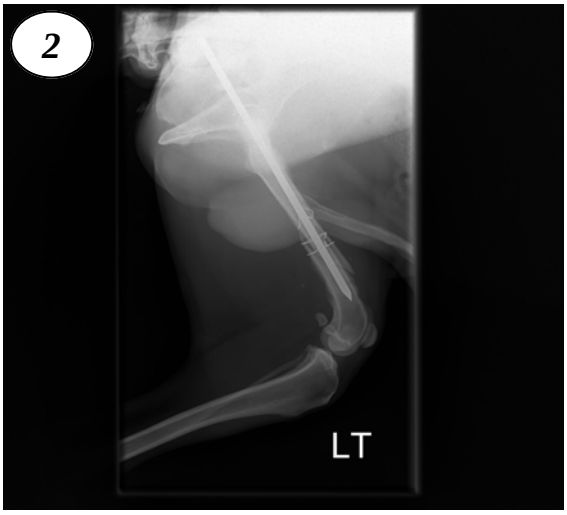
- Take care if using a splint or stick to give support. Ensure that no chaffing or further injury can occur. The best way to support a limb is to apply a good

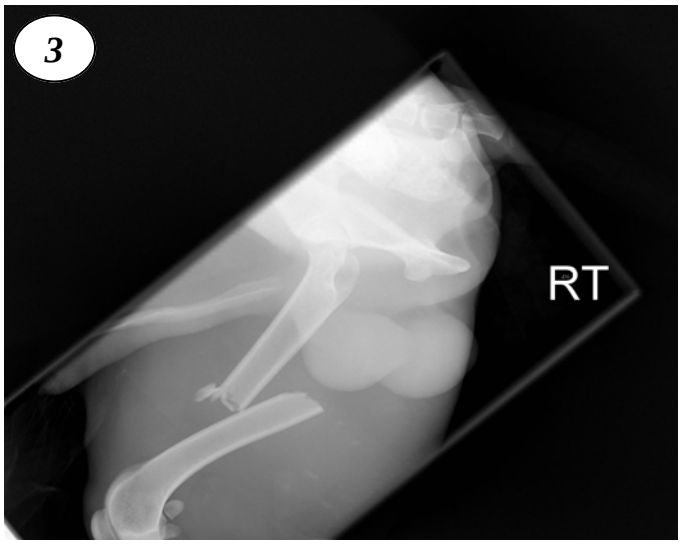
thick layer of soft bandaging or cotton wool and then firmly wrap an outer bandage layer over this. Make sure you can snugly fit your finger down between the bandage and the skin.

Call us on 27366 or 55366 (out of hours emergency mobile).

X-ray captions:

1. *comminuted fractures of a dogs metatarsals (foot bones) – the foot was immobilised in a cast and healed well*
2. *a more oblique fracture of a femur repaired with a pin and wires*
3. *a displaced transverse fracture of a dogs right femur*





Dates for the Diary

4th October	Public Holiday - Peat Cutting Monday
6th October	Dog Dosing Day (Droncit) *Please remember to contact the Veterinary Service on telephone 27366, fax 27352 or email imports@doa.gov.fk and advise when your dogs have been dosed*
31st October	Halloween
5th November	Guy Fawkes Day
1st December	Saladero Day *To include brassica cropping, pasture production, balloting of leased bulls and live-stock production (sheep and cattle).*
29th December	West Falkland Ram & Fleece Show *Contact Nigel Knight on telephone 42094 or email n.knight.coastridge@horizon.co.fk for details (more information to follow in the December Wool Press)*
February 2011	Field days at Bold Cove and Port Howard

ORGANIC WOOL - WHAT IS HAPPENING?

By Ian Campbell

Last year for the first time there was some fully accredited organic Falkland Island wool offered to the market. It is hoped that this year for the first time there will be significant quantities of accredited organic wool offered, maybe over one third of the total Falkland Island wool clip if the audits go well.

Organic products the world over are making premiums well above those produced and marketed conventionally. Everything, that is, apart from wool it might seem.

Generally it is thought that globally there has been a premium of around 5%, rather less than the 15% hoped for. If that remains the case it is barely enough to even compensate for being in the scheme - let alone make it a profitable decision. If it does not improve then it is likely that global supplies of organic wool will fall - and I am sure they will fall from here too.

Hopefully though this will improve. There are a number of organic farms about due for full accreditation, and if they pull out now they will be back to a three year scheme to qualify again so it is a tough choice. Organic production is a long term strategy.

Recently the Australian Organic Market Report was released - this was a very positive report highlighting the Australian organic industry is about to cross the $1 Billion mark. It is not only food that is selling well either- one can understand people particularly interested in the food they eat being organic. It is also cosmetics, cleaning products, all sorts of things; and interestingly many textiles. People are paying more for organic cotton, silk, even hemp, so wool is really the odd one out. At this stage at least.

The market analysts are still optimistic about wool. Some very large companies are committing themselves to organics as a general policy and this should include wool. There is not a lot of organic wool available yet, and most woollen mills need a lot to keep them going. Australia and Argentina both produce significant amounts of organic wool, but wool from the Falklands has the potential to have a significant effect on the world stocks of organic wool - if it just a critical mass they are waiting for this may help. All it will take is one major clothing manufacturer to decide they only want organic and away it will go.

The organic world often relies on agreements based upon equivalence. By way of example the UK Soil Association and the Australian Certified Organic (ACO) may have slightly different farm production standards for wool, but a woollen mill can accept either association's wool as they are essentially equivalent. So ACO may certify the greasy wool and the Soil Association the scouring, knitting or weaving mills etc. The final item may then have a Soil Association logo.

If British or Japanese organic mills want to start buying our wool hopefully we will be ready for them soon. But there is a limit to how long producers here will maintain their accreditation, so lets all hope something happens soon. The mulesing issue in Australia, although not organics as such, might hopefully bring the whole issue of ethical wool production standards to a head - and I think organics could eventually benefit from that.

Currently we are promoting Falkland Island wool at a huge organic textile fair in Japan and our message is a simple one.

> 南太平洋に位置するフォークランドアイランドは、本来の自然環境がそのまま存在する、世界で最もオーガニック農業が行われている国です。

Or for the benefit of those Wool Press readers who cannot read Japanese:

> "In the pristine environment in the South Atlantic Ocean the Falkland Islands is the most organic agricultural country in the world."

UPDATES FROM FALKLANDS CONSERVATION

Raptor-Livestock Interactions Project by Sam Cockwell

Overview

In June, Falklands Conservation, in conjunction with the Environmental Planning Department and the Department of Agriculture, began a project to investigate the impact of birds of prey (raptors) upon livestock within the Falkland Islands. This six month project is intended to develop techniques for monitoring the movements and behaviour of the birds, and determine farmer's views of the situation and their experiences with raptors. In order to accomplish this we are testing several methods for capture and tagging of birds, and also speaking to a number of farmers.

Progress

The project that started only 14 weeks ago has been going fantastically; and I would first like to thank everyone for their help and interest. We have been catching Southern Caracara (Carancho) at Teal Inlet, Turkey Vulture at Eliza Cove and Striated Caracara (Johnny Rook) at Fox Bay, Port Stephens, South Harbour, and Saunders Island. We have trialled four different methods of capture: a hand-noosing method which worked really well for Striated Caracara on Saunders Island; a wire ring with light nooses that is placed over a carcass was also quite successful; and we have also used a line with several snares. The final method we are currently trialling is a cage trap with a remotely operated door. Once refined, this method will be extremely effective, and the beauty of it is that it can be used very selectively.

We have also interviewed 10 farmers, but I would like to reassure everyone that if I have not yet tried to contact you it's not because I've forgotten or that I'm ignoring you! This project has many different elements to test and bring together, and we remain hopeful of extending the project by an additional 2-3 years. So, I definitely have it in mind to chat with everyone about their own experiences and feelings about raptors and the effect on farming.

Over the next few months we will be observing ewes and lambs to gather data on the impacts of raptors. In December, we will also study the movements and behaviour of Striated Caracara on Saunders Island.

When we have completed the project, we aim to share what we have learned with landowners and policymakers; and work together to resolve the conflict between the Falkland Islands birds of prey and the livelihoods of Islanders.

If anyone has any views they wish to share or any feedback, I am always contactable by email on sam.cockwell@conservation.co.fk, or 22247 at the office during working hours. I am interested if anyone has seen any tagged birds, especially Caracara species.

Introduction by Farrah Peck, Office Administrator

I took over from Carol Peck as Office Administrator at Falklands Conservation at the end of May. Since joining the team I have been involved with a variety of projects and activities.

In the very first week of work I was encouraged to get involved with the Bag for Life campaign to raise awareness of plastic pollution and to reduce the amount used in the Islands. After a frantic evening of transforming a pile of plastic bags and a roll of insulation tape into an outfit I was teetering on the edge of Eliza Cove tip's ramp, holding my rustling bag-skirt in place from the strong breeze. The subsequent photographs were plastered all over Stanley and the newspaper – a great introduction to Falklands Conservation and what they get up to!

In July I went on a day trip to collect tussac tillers with other conservation volunteers. We went by Sulivan launch to Kidney Island and spent a few good hours hauling loose tussac from the impressive bogs. This tussac was destined for the restoration of Surf Bay minefield, which a few months on seems to be taking well. Kidney Island was full of sealions, so I'm afraid I didn't venture far into the tussac in case one charged out - wimp you say? Probably yes!

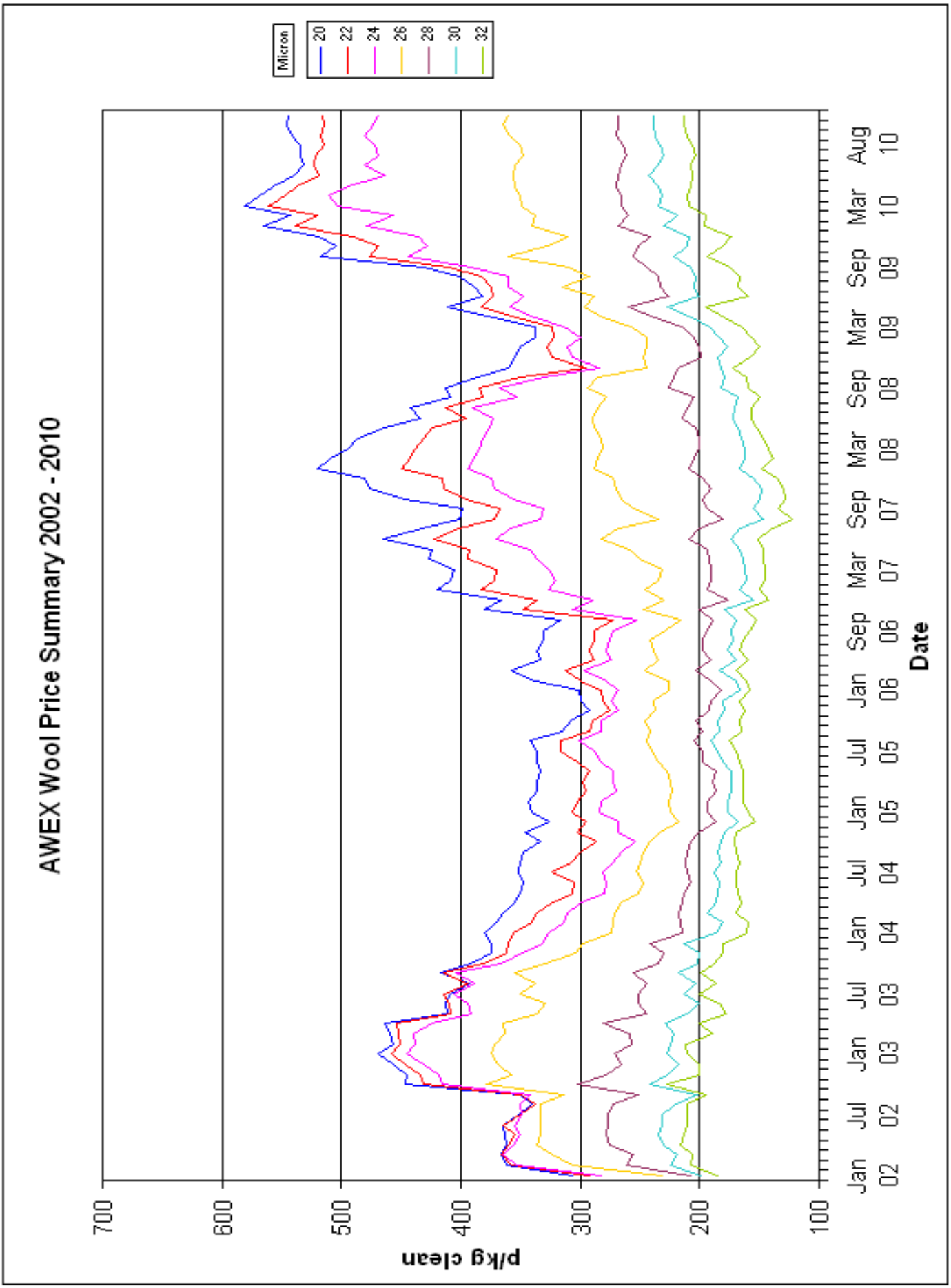
Also in July I took part in organising Falklands Conservation's involvement in the annual Farmers' Week. The Town Hall Expo went very well for us and we managed to catch up with land owners to discuss possible projects for this summer. The Curry Night at the Stanley Arms was also rather successful and even a short sing-song was provided! I enjoyed our Curry Night and was pleased to see a good attendance and people having a fine time. Hopefully I will see you all there again next year!

From the beginning of September the majority of my time has been taken up with preparations of the Falklands Conservation Ball – our annual fundraising evening of fine dining, raffle drawing, cocktails and dancing! I have never experienced the planning of such a large event before and I'm glad that Ali Liddle is firmly at the helm this year. The FIDF Drill Hall is transformed into an expanse of glossy wall coverings, twinkling lights and subtle sparkle. With this year's new addition of a cocktail bar and a dance floor equipped with disco ball I'm looking forward to donning my ball gown!

Finally as the spring turns to summer I will be Falklands Conservation's first point of call for tourists as they come into the office. It's set to be a busy few months, and when the cruise ships aren't in I hope to be out and about around the Islands to help with various projects.

WOOL PRICE TREND OVER TIME

Based on weekly DoA Wool Reports



Wool Press Recipe Corner

From Siân Ferguson, Stanley

Rice Krispies Treats

Ingredients

3 tablespoons butter or margarine
10 oz regular marshmallows
Or 4 cups miniature marshmallows
6 cups Rice Krispies

Method

In large saucepan melt butter over low heat. Add marshmallows and stir until completely melted. Remove from heat. Add Rice Krispies. Stir until well coated. Using a buttered spatula, evenly press mixture into a greased pan . Cool. Cut into 2-inch squares. They taste the best if they are eaten the same day!

This was a particular favourite of mine during college and as this is my last Wool Press (I leave the Department of Agriculture on the 30th September), I thought I had better contribute something!

Thank you to everyone I have worked with over the past five years, it's been an informative and enjoyable period, but the time has come to leave. Goodbye!

Family's flood of Joy

A newborn foal has become best friends with a family's cats and dogs after being rescued from floods.

Shetland foal Joy was found practically entombed in freezing cold mud in recent flooding in Victoria, Australia.

Rescuers dug her out and rushed her home where, in front of a roaring fire, she started to show signs of life.

Still less than two weeks old, Joy is now being cared for by Quest Equine Welfare president Rebecca Atkins at her home.

Her main playmates are two dogs, both taller and twice as heavy as she is, and she also loves snuggling up to cats Miffy and Willy for a snooze.

Ms Atkins said: "She needs a bottle of mare's milk formula every 40-45 minutes, then a 30-minute nap then play and prance time, and then we go through it all over again.

"It will be worth it if she survives because we can call her our greatest ever little miracle."

She is now virtually recovered from her ordeal, though her right eye is ulcerated as a result of her head being left packed in mud and it is unsure whether this will heal.

Source: Ananova.com

Puzzle Page

Trivia Time-Out

1. How much did the Penguin News cost in the year 2000?
2. What is the only cat native to the Old and New World?
3. In the British Army, what is a 'wad'?
4. Only two mammals lay eggs. One is the spiny-anteater, what is the other?
5. In which country would you find the world's biggest pyramid?
6. What was the good news for dogs in 1835?
7. The fastest creature on two legs is what?
8. What is the capital of Greenland?
9. What is L in the phonetic alphabet?
10. How many scoring zones are there on a conventional dart board?
11. Which famous artist also invented the scissors?
12. In which country is the driest place on earth?
13. In which direction do the Chinese read?
14. What colour are the eyebrows on the Mona Lisa?
15. Which is the worlds most widely used vegetable?
16. Which animal is faster than a horse, can go longer without water than a camel and can see behind without moving it's head?
17. Why were women not permitted to watch the original Olympic Games?
18. How many eyes does a bee have?
19. Which wood are cricket stumps usually made from?
20. From what ancient sporting activity does the word 'crestfallen' come?

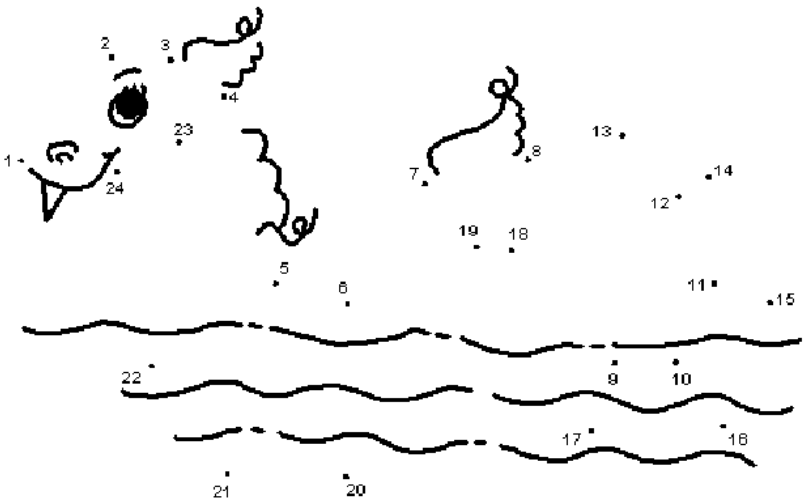
Sudoku

	2					7	6	
	5	3			8			
	1		7	2		5		4
				3		8		
		2	1	6	4	3		
		9		7				
2		4		9	6		5	
			2			4	3	
	3	7					2	

Each Sudoku has a unique solution that can be reached logically without guessing. Enter digits from 1 to 9 into the blank spaces. Every row must contain one of each digit. So must every column, as must every 3x3 square.

Good luck!

Dot-to-Dot

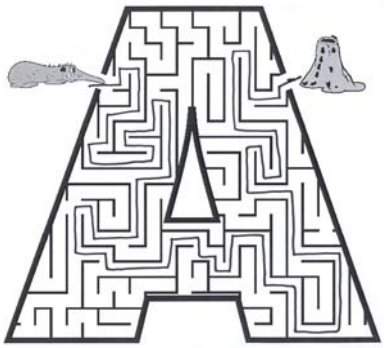


September Solutions

Animal Trivia

1 - false. 2 - arachnophobia. 3 - true. 4 - 2. 5 - gorilla. 6 - fish. 7 - true. 8- mare. 9 - kids. 10 - giraffe. 11 - true. 12 - false. 13 - spiders. 14 - none. 15 - 10 to 13 years.

What am I?
1 - The outside.
2 - Snake



7	5	3	8	9	2	1	6	4
2	4	1	7	3	6	8	9	5
6	8	9	1	5	4	7	2	3
4	2	5	9	8	1	3	7	6
1	7	6	4	2	3	9	5	8
9	3	8	6	7	5	2	4	1
8	6	4	2	1	7	5	3	9
5	9	2	3	4	8	6	1	7
3	1	7	5	6	9	4	8	2